UNCLASSIFIED

EXHIBIT R-	DATE:									
					Feb	ruary 2000				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE									
RESEARCH DEVELOPMENT TEST & EVALUAT	Program Element (PE) Name and No. Submarine Acoustic Warfare Development/0101226N									
COST (\$ in Millions)	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost				
Total PE Cost	0.997	1.103	3.089	8.891	CONT.	CONT.				
Submarine Defensive Warfare/V1265	0.879	0.997	1.103	3.089	8.891	CONT.	CONT.			
Quantity of RDT&E Articles										

A. Mission Description and Budget Item Justification: This project develops a Submarine Defensive Warfare System (SDWS) to improve the effectiveness and survivability of all classes of US submarines. Project efforts consist of a new acoustic threat intercept system (AN/WLY-1) that will have threat platform sonar and torpedo recognition capability for early detection, classification, and tracking of threats. It will allow radius of curvature and multipath ranging. The system will also include a control subsystem for launch management of all onboard countermeasure devices and launchers. Next Generation Countermeasure (NGCM) including Weapons Analysis Facility (WAF) simulation analysis capability provides the US Navy with testing of hardware and software within detailed representations of acoustic environments.

- 1. (U) FY 1999 Accomplishments:
 - (\$7.871) Completed sensor and software development and continued Phase II design review.
- 2. (U) FY 2000 Plan:
 - (\$3.178) Complete Phase II Design Review and conduct TECHEVAL/OPEVAL for the AN/WLY-1 system.
- 3. (U) FY 2001 Plan:
 - (.879) Perform WAF, Threat Weapon Vulnerability and Countermeasure Effectiveness Analysis.

R-1 SHOPPING LIST - Item No. 159 - 1 of 159 - 5

Exhibit R-2, RDT&E Budget Item Justification (Exhibit R-2, page 1 of 5)

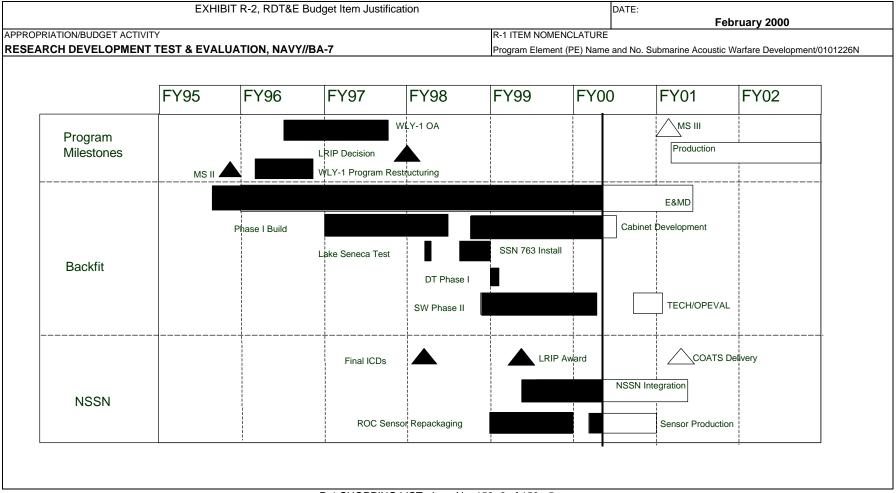
UNCLASSIFIED

EXHIBIT R-2, RDT&E Bud	dget Item Ju	stification			[DATE:			
							Febr	uary 2000	
APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOM	ENCLATURE				
RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY//B	A-7			Program Eleme	nt (PE) Name	and No. Subm	narine Acoustic	Warfare Develop	ment/0101226
B. Program Change Summary:									
5. Trogram change cummary.			FY 1999		FY 2000		FY 2001		
FY 2000 President's Budget:			8.328		3.195		0.871		
Appropriated Value:			8.328		3.195				
Adjustment to FY 1999/2000 Appropriated Value/									
FY 2000 President's Budget:			-0.457		-0.017		0.008		
FY 2001 PRES Budget Submit:			7.871		3.178		0.879		
FY 2000: Reductions due to undistributed rec FY 2001: Reductions due to undistributed re		Joseph Of the V		orogiam is to	00. 400 101 0	Z (4000331		220 000.	
Schedule: Not Applicable									
Technical: Not Applicable									
C. Other Program Funding Summary:									
OPN BLI: 221000/221005 Submarine Acoustic Warfare System	s								
							То	Total	
FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Complete	Cost	
7.253	11.140	10.697	13.876	21.327	30.467	33.211	CONT.	CONT.	
D. Acquisition Strategy: Multi-Year Competitive Contract for the	Backfit mar	rket starting i	n FY01.						
E. Schedule Profile: See Attached Schedule									

R-1 SHOPPING LIST - Item No. 159 - 2 of 159 - 5

Exhibit R-2, RDT&E Budget Item Justification (Exhibit R-2, page 2 of 5)

UNCLASSIFIED



R-1 SHOPPING LIST - Item No. 159- 3 of 159 - 5

Exhibit R-2, RDT&E Budget Item Justification (Exhibit R-2, page 3 of 5)

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 1)							February 2000						
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT					PROJECT NAME AND NUMBER								
RDT&E, N/BA-7		Sub Acou	stic Warfar	e Dev/01012	226N	Submarine	Defensive W	arfare Syster	ns/V1265				
Cost Categories	Contract	Performing	Total		FY 99		FY 00		FY 01				
(Tailor to WBS, or System/Item	Method	Activity &	PY s	FY 99	Award	FY 00	Award	FY 01	Award	Cost to	Total	Target Value	
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract	
Primary Hardware Development	C/CPAF	Northrop Grum Melville, N'	31.500	4.045	12/98	1.367	01/00			0.000	36.912	36.912	
Ancillary Hardware Development											0.000		
Systems Engineering	C/CPAF	General Dyn Groton,CT	4.778	0.000		0.000				0.000	4.778	5.717	
Systems Engineering	WR	PNSY	0.730	0.000		0.000				0.000	0.730	0.830	
Systems Engineering	WR	NUWC Newport, RI	0.000	2.763	11/98	0.025	11/99	0.604	11/00	CONT.	CONT.	CONT.	
Licenses											0.000		
Tooling											0.000		
GFE											0.000		
GFE											0.000		
Award Fees											0.000		
Award Fees Subtotal Product Development Remarks: Award Fees: (FY - Amount Budge FY92 - \$205,367 - 57%	FY95 - \$63,	010 - 49% FY98 - \$22	37.008 20,000 - 74% 4,566 - 77%	6.808		1.392		0.604		0.000	45.812		
Award Fees Subtotal Product Development Remarks: Award Fees: (FY - Amount Budge FY92 - \$205,367 - 57% FY93 - \$184,830 - 66%	FY95 - \$63, FY96 - \$27	010 - 49% FY98 - \$22	:0,000 - 74% 4,566 - 77%	6.808		1.392		0.604		0.000			
Award Fees Subtotal Product Development Remarks: Award Fees: (FY - Amount Budge FY92 - \$205,367 - 57% FY93 - \$184,830 - 66%	FY95 - \$63, FY96 - \$27	010 - 49% FY98 - \$22 1,199 - 88% FY99 - \$23	:0,000 - 74% 4,566 - 77%	6.808		1.392		0.604		0.000			
Award Fees Subtotal Product Development Remarks: Award Fees: (FY - Amount Budge FY92 - \$205,367 - 57% FY93 - \$184,830 - 66% FY94 - \$154,025 - 78%	FY95 - \$63, FY96 - \$27	010 - 49% FY98 - \$22 1,199 - 88% FY99 - \$23	:0,000 - 74% 4,566 - 77%	6.808		1.392		0.604		0.000	45.812		
Award Fees Subtotal Product Development Remarks: Award Fees: (FY - Amount Budge FY92 - \$205,367 - 57% FY93 - \$184,830 - 66% FY94 - \$154,025 - 78% Development Support Equipment	FY95 - \$63, FY96 - \$27	010 - 49% FY98 - \$22 1,199 - 88% FY99 - \$23	:0,000 - 74% 4,566 - 77%	6.808		1.392		0.604		0.000	45.812		
Award Fees Subtotal Product Development Remarks: Award Fees: (FY - Amount Budge FY92 - \$205,367 - 57% FY93 - \$184,830 - 66% FY94 - \$154,025 - 78% Development Support Equipment Software Development	FY95 - \$63, FY96 - \$27	010 - 49% FY98 - \$22 1,199 - 88% FY99 - \$23	:0,000 - 74% 4,566 - 77%	6.808		1.392		0.604		0.000	45.812 0.000 0.000		
Award Fees Subtotal Product Development Remarks: Award Fees: (FY - Amount Budge FY92 - \$205,367 - 57% FY93 - \$184,830 - 66% FY94 - \$154,025 - 78% Development Support Equipment Software Development Training Development	FY95 - \$63, FY96 - \$27	010 - 49% FY98 - \$22 1,199 - 88% FY99 - \$23	:0,000 - 74% 4,566 - 77%	6.808		1.392		0.604		0.000	0.000 0.000 0.000		
Award Fees Subtotal Product Development Remarks: Award Fees: (FY - Amount Budge FY92 - \$205,367 - 57% FY93 - \$184,830 - 66% FY94 - \$154,025 - 78% Development Support Equipment Software Development Training Development Integrated Logistics Support	FY95 - \$63, FY96 - \$27	010 - 49% FY98 - \$22 1,199 - 88% FY99 - \$23	:0,000 - 74% 4,566 - 77%	6.808		1.392		0.604		0.000	0.000 0.000 0.000 0.000		
Award Fees Subtotal Product Development Remarks: Award Fees: (FY - Amount Budge FY92 - \$205,367 - 57% FY93 - \$184,830 - 66% FY94 - \$154,025 - 78% Development Support Equipment Software Development Training Development Integrated Logistics Support Configuration Management	FY95 - \$63, FY96 - \$27	010 - 49% FY98 - \$22 1,199 - 88% FY99 - \$23	:0,000 - 74% 4,566 - 77%	6.808		1.392		0.604		0.000	0.000 0.000 0.000 0.000 0.000 0.000		
Award Fees Subtotal Product Development Remarks: Award Fees: (FY - Amount Budge FY92 - \$205,367 - 57% FY93 - \$184,830 - 66% FY94 - \$154,025 - 78% Development Support Equipment Software Development Training Development Integrated Logistics Support Configuration Management Technical Data	FY95 - \$63, FY96 - \$27	010 - 49% FY98 - \$22 1,199 - 88% FY99 - \$23	:0,000 - 74% 4,566 - 77%	6.808 6.808	Various	1.392 1.392 0.239 0.239		0.604		0.000 CONT.	0.000 0.000 0.000 0.000 0.000 0.000 0.000	CONT.	

R-1 SHOPPING LIST - Item No. 159 - 4 of 159 - 5

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 4 of 5)

UNCLASSIFIED

								DATE:					
Exhibit R-3 Cost Analysis (page 2)						February 2000							
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT					PROJECT NAME AND NUMBER								
RDT&E, N/BA-7		Sub Aco	ustic Warfar	e Dev/0101	226N	Submarine	Defensive W	/arfare Syste	ms/V1265				
Cost Categories (Tailor to WBS, or System/Item	Contract Method	Performing Activity &	Total PY s	FY 99	FY 99 Award	FY 00	FY 00 Award	FY 01	FY 01 Award	Cost to	Total	Target Value	
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract	
Developmental Test & Evaluation	WR	OPTEVFOR Norfolk, VA	0.055	0.000						0.000	0.055	0.055	
Operational Test & Evaluation	WR	OPTEVFOR Norfolk, VA				1.047	03/00				1.047	1.175	
Operational Test & Evaluation											0.000		
GFE											0.000		
Subtotal T&E			0.055	0.000		1.047		0.000		0.000	1.102		
Contractor Engineering Support			<u> </u>	<u> </u>							0.000		
Government Engineering Support											0.000		
Program Management Support	C/CPFF	RM Vredenburg Reston, VA	0.750	0.767	12/98	0.400	11/99	0.200	12/00	CONT.	CONT.	CONT.	
Travel		PMS415	0.110	0.100		0.100		0.075		CONT.	CONT.	CONT.	
Labor (Research Personnel)											0.000		
Overhead											0.000		
Subtotal Management			0.860	0.867		0.500		0.275		0.000	2.502		
Remarks:													
Total Cost			37.923	7.871		3.178		0.879		CONT.	CONT.	CONT.	
Remarks:													

R-1 SHOPPING LIST - Item No. 159 - 5 of 159 - 5

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 5 of 5)